

REMARKS

By this Amendment, claims 1, 3, 10, 12, 16 and 19 are amended to merely clarify the recited subject matter and a second substitute specification is submitted to correct the informalities noted by the outstanding Office Action. Claims 1-20 are pending.

Support for the claim amendments may be found in Applicants' specification at page 2, lines 19-21, page 3, lines 5-11, page 6, lines 9-14, of the previously submitted substitute specification.

Claims 1-9 and 12-18 were rejected under 35 U.S.C. 112, first paragraph. Applicants have amended the claims to overcome the rejection by deleting the objectionable material and adding language that more literally reads on the specification. Nevertheless, it should be understood that these amendments do not constitute an admission that the previously submitted amendments were unsupported by the originally filed specification.

Claims 1-7, 12, 14 and 16-18 were rejected under 35 U.S.C. 102(a) as being anticipated by Salmela et al. (WO 98/30056; hereafter "Salmela"), claims 8, 10, 11, 13 and 15 were rejected under 35 U.S.C. 103(a) as being unpatentable over Salmela and Nordstrand et al. (U.S. 6,334,052; hereafter "Nordstrand"), and claims 19 and 20 were rejected under 35 U.S.C. 103(a) as being unpatentable over Salmela, Nordstrand and Seppanen et al. (U.S. 5,903,832; hereafter "Seppanen"). Applicants traverse the prior art rejections because the cited prior art, analyzed individually or in combination, fails to disclose, teach or suggest the claimed invention wherein some of the location areas are defined to be exclusive location areas, an exclusive location area comprising exclusive cells for which an exclusive service condition is defined, and checking is performed during a location update procedure whether the new location area is an exclusive location area; and if the new location area is an exclusive location area, the exclusive service condition of the call is used in determining whether or not the subscriber is allowed to camp in the cell.

SALMELA

Salmela merely discloses a solution for providing localized services in cellular systems. In Salmela, location areas form regions within each of which the mobile station may roam freely without notifying the visiting location register. Additionally, Salmela discloses that a list of special cells may be defined for a subscriber. The cells in this list form a localized service area of the subscriber. The list of special cells may be utilized to control the operation of the mobile station used by the subscriber. Salmela also discusses several

types of special cells, and mentions also control operations restricting the access of the mobile station to some cells.

However, Salmela fails to disclose, teach or suggest defining some of the location areas to be exclusive location areas, an exclusive location area including exclusive cells for which an exclusive service condition is defined. The Office Action referred to the localized service areas of Salmela, which are defined as a list of special cells drawn up for a subscriber (for example, page 4, lines 9-10, and 15-16, and page 5, lines 15-16, and page 15, lines 26-33). Thus, the definition is made for a subscriber or a subscriber group (page 15, lines 26-28), not for a location area of the network subsystem. A special cell of a location area may then naturally exist in a special service area; however, in Salmela, the other cells with the same location area identifier may or may not belong to the special service area. Thus, a subscriber roaming within a location area may try to camp in special cells and non-special cells without having a trigger to update its location.

Moreover, Salmela fails to disclose, teach or suggest checking, during a location update procedure, whether a new location area is an exclusive location area. Since no exclusive location areas are defined, such checking is neither discussed nor suggested in Salmela. In fact, the only action implemented during the location update procedure in Salmela is delivery of the list of special cells to the mobile station, which is clearly not the same as the action implemented during the claimed location update procedure. Simply put, delivery of a list of special cells does not correspond with checking a location area type. Although Salmela discloses a checking operation, it occurs at a different stage. when the mobile station receives a new broadcast cell identifier. The checking is also implemented differently: the mobile station checks whether the new cell is in its own list of special cells. Checking a cell identifier does not correspond with checking a location area.

Additionally, Salmela fails to disclose or suggest using an exclusive service condition of a cell in determining whether or not the subscriber is allowed to camp in the cell. To the contrary, in Salmela, any control operations restricting the user's ability to camp in the cell are made based on a list of cells of a subscriber, not on an exclusive service condition that is defined for a particular cell and governing operations of that cell. A cell identifier itself does not relate to any particular service, and a list cell identifiers of a subscriber is clearly not the same as exclusive service condition of a cell.

Thus, Salmela fails to teach defining exclusive location areas, and the checking relating to them during location update, and therefore claims 1-7, 12, 14 and 16-18 are

patentable over Salmela. Claims 8, 9, 13 and 15 are, as a consequence, patentable since the claims they depend on, are patentable.

With reference also to claims 10 and 19, Salmela also fails to disclose broadcasting an indication indicating that the cell is an exclusive cell that belongs to an exclusive location area. Salmela merely discloses that a base transceiver station may broadcast some cell-specific information, for example a cell identifier or a message indicating that the cell provides a certain special service for the mobile stations in the network. However, since no exclusive location areas are defined, and cells of one location area may be exclusive or non-exclusive, such a message does not give any indication on whether the cell belongs to an exclusive location area.

NORDSTRAND

The Office Action has recognized that Salmela fails to teach or suggest determining the possibility of camping in a mobile station and camping measurements being taken after that. However, the Office Action asserted that Nordstrand remedies this deficiency. However, Nordstrand fails to teach or suggest the concept of exclusive location areas. Additionally Nordstrand fails to disclose sending a location update request if camping is allowed, after the mobile station has determined whether camping is allowed. In Nordstrand, the cell broadcasts "exclusive access" indicator. By using their specific subscriber-based information some mobile stations may then ignore a "cell barred" indicator, and proceed with the cell re-selection procedure. For one of ordinary skill in the art, cell re-selection relates to movement of a mobile station from one cell area to another, and it may lead to changeover, handover, or location updating. However, the decision to continue cell re-selection procedure clearly does not correspond with sending a location update procedure.

Thus, in Nordstrand, a location update may or may not take place after a detected "cell barred" indicator, disregarding the check whether the camping to the particular cell is allowed or not

SEPPANEN

As asserted previously, Seppanen merely discloses that a mobile terminal searches for a suitable network and if a suitable network is not found, enters the limited service state. However, a suitable network is not the same as a suitable cell. Thus, Seppanen fails to disclose that if a suitable cell is not found, the mobile terminal enters the limited service state.

Moreover, because Nordstrand teaches continuing the cell selection/re-selection process during the location update (see, Nordstrand, Figures 4 and 5) if a suitable cell is not found, a system resulting from the combined teachings of Nordstrand and Seppanen would merely provide a solution in which, if a suitable network is not found, the mobile station enters the limited service state but if a suitable network is found, the mobile terminal tries to find a suitable cell, and if a suitable cell is not found, the mobile terminal continues the cell selection/reselection process. That operation is contrary to the invention recited in claims 10 and 19.

Moreover, Salmela teaches either to select one of the permitted cells or to connect to one of the forbidden cells, if it cannot otherwise receive network services (Salmela, page 14, lines 15-20). Therefore, by combining Seppanen with Salmela, one skilled in the art would merely provide a solution in which, if a suitable network is not initially found, the mobile station enters the limited service state, but if a suitable network has been found, the mobile terminal tries to find a suitable cell, and if a suitable cell is not found, instead of entering a limited service state, the mobile station would camp to an exclusive cell. Another possible solution based on the combined teachings would have been that, if a suitable network is not found, then the mobile station camps in a non-suitable network. However, that too is contrary to what is claimed in claims 10 and 19. Therefore, claims 10 and 19 and their respective dependent claims are patentable over Salmela in view of Nordstrand and in view of Seppanen.

All objections and rejections having been addressed, Applicants request that the Examiner issue a Notice of Allowance indicating the allowability of all of the pending claims. However, if anything further is necessary to place the application in condition for immediate allowance, Applicants request that the Examiner telephone Applicants' undersigned representative at the number listed below.

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Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,

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